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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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William I. Chang

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Haynes and Boone, LLP

IP Section

2323 Victory Avenue

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EXAMINER

BETT, JACOB F

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,940	Applicant(s) CHANG, WILLIAM I.	
	Examiner Jacob F. Bétit	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 and 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,9,14,15,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In response to communications filed on 27 October 2009, claims 1 and 14 have been amended per the applicant's request.
2. Claims 1-9 and 14-22 are presently pending in the application of which claims 3-7 and 16-20 have been withdrawn from further consideration pursuant to the applicant's election without traverse filed 28 February 2007.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 8, 9, 14, 15, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaiswal et al. ("A distributed Event Logging System) in view of Tierney et al. ("The NetLogger Methodology for High Performance Distributed Systems Performance Analysis") and Lubberst et al. (U.S. patent application publication No. 2003/0187847 A1).

As to claim 1, Jaiswal et al. teaches a distributed system comprising:

a plurality of cooperative processes running on a plurality of processors of a computer network to accomplish distributed transactions (see page 1, 2nd paragraph), each process logging in a local resource, records of execution of the distributed transactions by the process on its

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processor (see section 5, 2nd paragraph, "logs for a machine would reside on that machine only");

a search engine running on each of the plurality of processors, each search engine retrieving corresponding records of execution in response to a query regarding any of the distributed transactions (see section 6),

wherein each search engine generates indices of the records of execution (see section 4), and a portion of the indices are stored onto a storage medium after a specific time period (see section 4, "periodically, the files are backed up and a new file is generated").

Jaiswal et al. does not distinctly disclose a system synchronizer sending a timing message to be logged to the plurality of cooperative processes.

However, Tierney et al. teaches this, see section "2.1 Clock Synchronization: NTP". Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Jaiswal et al. to include the teachings of Tierney et al. because these teachings would provide accurate timing between the multiple processes on different systems allowing for logged results on the systems to accurate timestamps.

Jaiswal et al. as modified, still does not distinctly disclose the indices [initially] being stored in memory, and the indices in memory and the portion of the indices stored onto the storage medium are merged subsequently.

However, Lubbers et al. teaches this, see paragraphs 0012-0013. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Jaiswal et al. to include the teachings of Lubbers et al. because these teachings would

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be a way of managing local storage space dedicated to the log allowing for alternate locations for log data that has been around for a period of time.

As to claim 2, Jaiswal et al. as modified, teaches wherein the query is issued to the processors as a distributed query (see Jaiswal et al., section 6).

As to claim 8, Jaiswal et al. as modified, teaches wherein the query is issued from a client which merges the results received from search engines responding to the query (see Jaiswal et al. section 6, paragraphs 2 and 4).

As to claim 9, Jaiswal et al. as modified, teaches wherein the client applies program rules on the merged results to determine correct operation of the distributed system (see Jaiswal et al., section 1, paragraph 2).

As to claim 14, Jaiswal et al. teaches a method for analyzing a distributed system, comprising:

running a plurality of cooperative processes on a plurality of processors of a computer network to accomplish distributed transactions (see page 1, 2nd paragraph), each process logging, in a local resource, records of execution of the distributed transactions by the process on its processor (see section 5, 2nd paragraph);

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running a search engine on each of the plurality of processors, each search engine retrieving corresponding records of execution in response to a query regarding the distributed transaction (see section 6),

wherein each search engine generates indices of the records of execution, and stores a portion of the indices onto a storage medium after a specific time period (see section 4).

Jaiswal et al. does not distinctly disclose sending a timing message to be logged to the plurality of cooperative processes.

However, Tierney et al. teaches this, see section "2.1 Clock Synchronization: NTP". Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Jaiswal et al. to include the teachings of Tierney et al. because these teachings would provide accurate timing between the multiple processes on different systems allowing for logged results on the systems to accurate timestamps.

Jaiswal et al. as modified, still does not distinctly disclose the indices [initially] being stored in memory, and the indices in memory and the portion of the indices stored onto the storage medium are merged subsequently.

However, Lubbers et al. teaches this, see paragraphs 0012-0013. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Jaiswal et al. to include the teachings of Lubbers et al. because these teachings would be a way of managing local storage space dedicated to the log allowing for alternate locations for log data that has been around for a period of time.

As to claim 15, the applicant is directed to claim 2 above.

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As to claim 21, the applicant is directed to claim 8 above.

As to claim 22, the applicant is directed to claim 9 above.

Response to Arguments

5. Applicant's arguments with respect to claims have been fully considered, but are not deemed persuasive.

6. In response to the applicant's arguments that "Lubbers does not disclose, teach, or suggest Claim 1's 'each search engine generates indices of the records of execution in memory, and a portion of the indices are stored onto a storage medium after a specific time period; and the indices in memory and the portion of the indices stored onto the storage medium are merged subsequently,'" the arguments have been considered, but are not deemed persuasive. It is first noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Jaiswal teaches that the log files are periodically backed up and a new file is generated. This is the same as applicants "wherein each search engine generates indices of the records of execution in memory, and a portion of the indices are stored onto a storage medium after a specific time period. However, Jaiswal teaches creating separate files for each record log and does not teach that the different files are merged. Lubbers teaches the capability of merging different logs (index files) into one log before they are merged onto the local system (see paragraph 0060, "when required, the cached writes can be written to a log on a media along with subsequent host writes and then later replayed to merge the pending writes, in order..."). That is,

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Lubbers teaches the subsequent merging of the log files of Jaiswal as it is applied to claim 1.

Therefore, the combination of references does teach the contested limitation.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob F. Bétit whose telephone number is (571)272-4075. The examiner can normally be reached on Monday through Friday 9:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Jacob F Bétit/
Examiner, Art Unit 2169

jfb
25 Jan 2010